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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

CHOJNACKI, MELLISSA M

ART UNIT	PAPER NUMBER
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2175

DATE MAILED: 08/11/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/079,563

Applicant(s)

KASHITO ET AL.

Examiner

Melissa M Chojnacki

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.


SAM RIMELL
PRIMARY EXAMINER

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon et al. (U.S. Patent No. 6,098,074) in view of DuMouchel et al. (U.S. Patent No. 6,539,391).

As to claim 1, Cannon et al. teaches an information management apparatus applied to an information processor including a data storage unit in which various data are stored and an output unit to present information including contents stored in the data storage unit (See abstract; column 4, lines 52-56), the information management apparatus comprising:

information data input means for inputting information data (See column 4, lines 62-65),

manager means for storing in the data storage unit the information data input through the information data input means and the summary data generated by the summary data generation means in correspondence (See column 4, lines 52-65; column 11, lines 41-53),

wherein the manager means comprises data reduction means for reducing a data amount of at least one of predetermined the information data (See column

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4, lines 26-35) and the summary data stored in correspondence in the data storage unit until a capacity available for storage is ensured when the capacity to store the information data newly input through the information data input means and corresponding the summary data is insufficient in the data storage unit (See column 4, lines 26-35; column 7, lines 59-61, where "capacity" is read on "volume"; column 8, lines 8-11; column 16, lines 33-36);

the predetermined information data and summary data being selected according to a criterion set in a variable manner (See abstract, column 2, lines 15-19).

Cannon et al. does not teach summary data generation means for generating summary data that can indicate succinctly- contents of the information data input through the information data input means.

DuMouchel et al. teaches a method and system for squashing a large data set (See abstract), in which he teaches summary data generation means for generating summary data that can indicate succinctly contents of the information data input through the information data input means (See column 1, lines 6-7, lines 43-47; column 3, lines 6-9).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have modified Cannon et al., to include summary data generation means for generating summary data that can indicate succinctly- contents of the information data input through the information data input means.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cannon et al., by the teachings of DuMouchel et al. because summary data generation means for generating summary data that can indicate succinctly- contents of the information data input through the information data input means would make it feasible for large data files, with condensed summaries to fit into physical memory (See DuMouchel et al., column 1, lines 14-17, lines 40-45).

As to claim 2, Cannon et al. as modified, teaches wherein the data reduction means reduces the data amount of at least one of the predetermined information data and summary data in a stepped manner (See Cannon et al., column 2, lines 49-54).

As to claim 3, Cannon et al. as modified, teaches wherein reduction of the data amount is effected by deleting at least one of the predetermined information data and summary data from the data storage unit (See Cannon et al., column 15, lines 57-60).

As to claim 4, Cannon et al. as modified, teaches wherein reduction of the data amount is effected by compressing at least one of the predetermined information data and summary data in the data storage unit (See DuMouchel et al., abstract; column 4, lines 54-57).

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As to claim 5, Cannon et al. as modified, teaches wherein, when the available capacity for storage is still insufficient even after all the predetermined information data and summary data are compressed in the data storage unit (See Cannon et al., column 4, lines 27-35; column 7, lines 59-61, where “capacity” is read on “volume”; column 8, lines 8-11; column 16, lines 33-36), the manager means deletes at least one of the predetermined information data and summary data stored in correspondence in the data storage unit until the available capacity for storage is ensured in the data storage unit (See Cannon et al., column 15, lines 57-60).

As to claim 6, Cannon et al. as modified, teaches wherein the data amount of at least one of the predetermined information data and summary data is deleted in a stepped manner until the available capacity for storage is ensured (See Cannon et al., column 15, lines 57-60).

As to claim 7, Cannon et al. as modified, teaches further comprising importance level determination means for determining a level of importance of the information data corresponding to the summary data based on a variably-set predetermined guideline, the criterion corresponding to the level of importance determined by the importance level determination means (See Cannon et al., abstract; column 11, lines 6-17, lines 30-38).

As to claim 8, Cannon et al. as modified, teaches further comprising guideline set means operated by an eternal source for setting the predetermined guideline in a variable manner (See Cannon et al., abstract; also see DuMouchel et al., abstract; column 1, lines 43-47, where “guideline” is read on “characteristic values”).

As to claim 9, Cannon et al. as modified, teaches wherein the level of importance corresponding to the predetermined information data and summary data is lower than the level of importance of the newly input information data (See Cannon et al., abstract; column 11, lines 6-17, lines 30-38).

As to claim 10, Cannon et al. as modified, teaches wherein the manager means comprises insufficient capacity determination means for determining the insufficient capacity based on a comparison result by comparing an available capacity in the data storage unit and a total size of the information data newly input through the information data input means and corresponding the summary data (See Cannon et al., column 4, lines 27-35; column 7, lines 59-61, where “capacity” is read on “volume”; column 8, lines 8-11; column 16, lines 33-36).

As to claim 11, Cannon et al. as modified, teaches wherein the summary data generation means generates the summary data based on data obtained according to a predetermined condition from contents of the information data (See DuMouchel et al., column 1, lines 6-7, lines 43-47; column 3, lines 6-9), and

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wherein the predetermined condition is set, in a variable manner (See Cannon et al., abstract, column 2, lines 15-19).

As to claim 12, Cannon et al. as modified, teaches further comprising condition set means operated by an external source for setting the predetermined condition in a variable manner (See Cannon et al., abstract, column 2, lines 15-19; also see DuMouchel et al., column 2, lines 14-18, lines 44-49).

As to claim 13, Cannon et al. teaches an information management method (See abstract; column 4, lines 52-56) comprising:

an information data input step of inputting information data (See column 4, lines 62-65),

an organization step storing in correspondence the information data input at the information data input step and the summary data generated at the summary data generation step in a data storage unit prepared in advance from which stored contents are presented via an output unit prepared in advance (See column 4, lines 52-65; column 11, lines 41-53),

wherein the organization step includes a data reduction step of reducing a data amount of at least one of predetermined the information data (See column 4, lines 26-35) and the summary data stored in correspondence in the data storage unit until a capacity available for storage is ensured when the capacity to store the information data newly input at the information data input step and

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corresponding the summary data is insufficient in the data storage unit (See column 4, lines 26-35; column 7, lines 59-61, where “capacity” is read on “volume”; column 8, lines 8-11; column 16, lines 33-36);

wherein the predetermined information data and summary data are selected according to a criterion set in a variable manner (See abstract, column 2, lines 15-19).

Cannon et al. does not teach a summary data generation step of generating summary data that can indicate succinctly contents of the information data input at the information data input step.

DuMouchel et al. teaches a method and system for squashing a large data set (See abstract), in which he teaches a summary data generation step of generating summary data that can indicate succinctly contents of the information data input at the information data input step (See column 1, lines 6-7, lines 43-47; column 3, lines 6-9).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have modified Cannon et al., to include a summary data generation step of generating summary data that can indicate succinctly contents of the information data input at the information data input step.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cannon et al., by the teachings of DuMouchel et al. because a summary data generation step of generating summary data that can indicate succinctly contents of the information

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data input at the information data input step would make it feasible for large data files, with condensed summaries to fit into physical memory (See DuMouchel et al., column 1, lines 14-17, lines 40-45).

As to claim 14, Cannon et al. teaches an information management method (See abstract; column 4, lines 52-56) comprising:

an information data input step of inputting information data (See column 4, lines 62-65),

an organization step storing in correspondence the information data input at the information data input step and the summary data generated at the summary data generation step in a data storage unit prepared in advance from which stored contents are presented via an output unit prepared in advance (See column 4, lines 52-65; column 11, lines 41-53),

the summary data stored in correspondence in the data storage unit until an available capacity for storage is ensured when the capacity to store the information data newly input at the information data input step and corresponding the summary data is insufficient in the data storage unit (See column 4, lines 26-35; column 7, lines 59-61, where "capacity" is read on "volume"; column 8, lines 8-11; column 16, lines 33-36);

wherein the predetermined information data and summary data are selected according to a criterion set in a variable manner (See abstract, column 2, lines 15-19).

Cannon et al. does not teach a summary data generation step of generating summary data that can indicate succinctly contents of the information data input at the information data input step; wherein the organization step comprises a compression step of compressing at least one of predetermined the information data.

DuMouchel et al. teaches a method and system for squashing a large data set (See abstract), in which he teaches a summary data generation step of generating summary data that can indicate succinctly contents of the information data input at the information data input step (See column 1, lines 6-7, lines 43-47; column 3, lines 6-9); wherein the organization step comprises a compression step of compressing at least one of predetermined the information data (See abstract; column 4, lines 54-57).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have modified Cannon et al., to a summary data generation step of generating summary data that can indicate succinctly contents of the information data input at the information data input step; wherein the organization step comprises a compression step of compressing at least one of predetermined the information data.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cannon et al., by the teachings of DuMouchel et al. because a summary data generation step of generating summary data that can indicate succinctly contents of the information data input at the information data input step; wherein the organization step

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comprises a compression step of compressing at least one of predetermined the information data would make it feasible for large data files, with condensed summaries to fit into physical memory (See DuMouchel et al., column 1, lines 14-17, lines 40-45).

As to claim 15, Cannon et al. teaches a machine-readable recording medium recorded with an information management program to execute an information management method with the machine,

the information management (See abstract; column 4, lines 52-56) method comprising:

an information data input step of inputting information data (See column 4, lines 62-65),

an organization step storing in correspondence the information data input at the information data input step and the summary data generated at the summary data generation step in a data storage unit prepared in advance from which stored contents are presented via an output unit prepared in advance (See column 4, lines 52-65; column 11, lines 41-53),

wherein the organization step includes a data reduction step of reducing a data amount of at least one of predetermined the information data (See column 4, lines 26-35) and the summary data stored in correspondence in the data storage unit until a capacity available for storage is ensured when the capacity to store the information data newly input at the information data input step and corresponding the summary data is insufficient in the data storage unit, (See

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column 4, lines 26-35; column 7, lines 59-61, where "capacity" is read on "volume"; column 8, lines 8-11; column 16, lines 33-36);

wherein the predetermined information data and summary data are selected according to a criterion set in a -variable manner (See abstract, column 2, lines 15-19).

Cannon et al. does not teach a summary data generation step of generating summary data that can indicate succinctly contents of the information data input at the information data input step.

DuMouchel et al. teaches a method and system for squashing a large data set (See abstract), in which he teaches a summary data generation step of generating summary data that can indicate succinctly contents of the information data input at the information data input step (See column 1, lines 6-7, lines 43-47; column 3, lines 6-9).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have modified Cannon et al., to a summary data generation step of generating summary data that can indicate succinctly contents of the information data input at the information data input step.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cannon et al., by the teachings of DuMouchel et al. because a summary data generation step of generating summary data that can indicate succinctly contents of the information data input at the information data input step would make it feasible for large data

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files, with condensed summaries to fit into physical memory (See DuMouchel et al., column 1, lines 14-17, lines 40-45).

As to claim 16, Cannon et al. teaches a program product to execute an information management method with a computer,

the information management (See abstract; column 4, lines 52-56) method comprising:

an information data input step of inputting information data (See column 4, lines 62-65),

an organization step of storing in correspondence the information data input at the information data input step and the summary data generated at the summary data generation step in a data storage unit prepared in advance from which stored contents are presented via an output unit prepared in advance, (See column 4, lines 52-65; column 11, lines 41-53),

wherein the organization step comprises a data reduction step of reducing at least one of predetermined the information data (See column 4, lines 26-35) and the summary data stored in correspondence in the data storage unit until an available capacity for storage is ensured when the capacity to store the information data newly input at the information data input step and corresponding the summary data is insufficient in the data storage unit (See column 4, lines 26-35; column 7, lines 59-61, where "capacity" is read on "volume"; column 8, lines 8-11; column 16, lines 33-36), wherein the predetermined information data and

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summary data are selected according to a criterion set in a variable manner (See abstract, column 2, lines 15-19).

Cannon et al. does not teach a summary data generation step of generating summary data that can indicate succinctly contents of the information data input at the information data input step.

DuMouchel et al. teaches a method and system for squashing a large data set (See abstract), in which he teaches a summary data generation step of generating summary data that can indicate succinctly contents of the information data input at the information data input step (See column 1, lines 6-7, lines 43-47; column 3, lines 6-9).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to have modified Cannon et al., to a summary data generation step of generating summary data that can indicate succinctly contents of the information data input at the information data input step.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Cannon et al., by the teachings of DuMouchel et al. because a summary data generation step of generating summary data that can indicate succinctly contents of the information data input at the information data input step would make it feasible for large data files, with condensed summaries to fit into physical memory (See DuMouchel et al., column 1, lines 14-17, lines 40-45).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mellissa M. Chojnacki whose telephone number is 730-305-8769. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici can be reached on 703-305-3830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mmc
August 6, 2004


SAM RIMELL
PRIMARY EXAMINER